

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of call handling in a wireless communication network comprising:

receiving an incoming voice call for a mobile station that is busy in a

packet-switched data call;~~and~~

sending an incoming call notification to the mobile station via signaling over an existing

traffic channel allocated to the data call; and

reconfiguring the existing traffic channel to support the incoming voice call and delivering

the incoming voice call to the mobile station via the reconfigured existing traffic

channel.

2-5. (Canceled)

6. (Currently amended) The method of claim ~~[[4]]~~1, further comprising, ~~if the data call was a packet data call,~~ suspending or ending a data transaction associated with the data call.

7. (Canceled)

8. (Currently amended) The method of claim ~~[[7]]~~1, wherein reconfiguring the existing traffic channel for use delivering the incoming voice call to the mobile station comprises establishing a new service option connection at a network Base Station (BS), and requesting a network Mobile Switching Center (MSC) to establish a voice connection for the incoming voice call.

9. (Currently amended) The method of claim 8, further comprising ~~determining whether the data call is, in a first case, a circuit-switched data call or, in a second case, is a packet data call, and in the second case requiring a return indication from the mobile station that indicates call delivery is desired before renegotiating the existing traffic channel, and in the first case renegotiating the existing traffic channel without requiring the return indication that call delivery is desired.~~

10. (Currently amended) A method of call handling in a wireless communication network comprising:

receiving an incoming voice call indication at a Base Station (BS) that is targeted to a mobile station busy in a packet-switched data call; and
determining if the data call is a packet-switched data call or a circuit-switched data call;
if the data call is a circuit-switched data call, reconfiguring a service connection of the mobile station to deliver the incoming voice call using an existing traffic channel previously allocated to the data call; and
if the data call is a packet-switched data call, sending a call notification message to the mobile station and, responsive to receiving a return acknowledgment from the mobile station, reconfiguring the service connection of the mobile station to deliver the incoming voice call using the existing traffic channel.

11, 12. (Canceled)

13. (Currently amended) The method of claim 10, further comprising, ~~if the data call is a packet-switched data call, releasing a packet data service associated with the packet-switched data call.~~

14. (Canceled)

15. (Original) The method of claim 10, wherein reconfiguring a service connection of the mobile station to deliver the incoming voice call using an existing traffic channel previously allocated to the data call comprises:

- sending a voice service call setup request to a Mobile Switching Center (MSC);
- receiving a voice circuit assignment from the MSC;
- establishing a voice service option connection at the BS to support the incoming voice call; and
- alerting the mobile station to inform the mobile station that the incoming voice call is setup.

16. (Original) The method of claim 15, wherein sending a voice service call setup request message to a Mobile Switching Center (MSC) comprises generating default voice service parameters at the BS rather than receiving requested voice service parameters from the mobile station.

17. (Currently amended) A Base Station (BS) to provide a call handling in a wireless communication network, the BS comprising:

- call processing and interface circuits configured to provide voice and data call handling for a plurality of mobile stations; and
- a notification processor configured to:
 - receive an incoming voice call indication at a Base Station (BS) that is targeted to a mobile station busy in a packet-switched data call; and

~~determine if the data call is a packet-switched data call or a circuit-switched data call;~~

~~if the data call is a circuit-switched data call, reconfigure a service connection of the mobile station to deliver the incoming voice call using an existing traffic channel previously allocated to the data call; and~~

~~if the data call is a packet-switched data call, send a call notification message to the mobile station and, responsive to receiving a return acknowledgment from the mobile station, reconfigure the service connection of the mobile station to deliver the incoming voice call using the existing traffic channel.~~

18. (Canceled)

19. (Currently amended) The BS of claim 17, wherein the BS is configured to suspend a packet data service associated with the data call after connecting the incoming voice call ~~if the data call was a packet-switched data call.~~

20. (Currently amended) The BS of claim 17, wherein the BS is configured to release a packet data service associated with the data call after connecting the incoming voice call ~~if the data call was a packet-switched data call.~~

21. (Canceled)

22. (Original) The BS of claim 17, wherein the BS reconfigures a service connection of the mobile station to deliver the incoming voice call using an existing traffic channel previously allocated to the data call based on:

sending a voice service call setup request to a Mobile Switching Center (MSC);
receiving a voice circuit assignment from the MSC;
establishing a voice service option connection at the BS to support the incoming voice call; and
alerting the mobile station to inform the mobile station that the incoming voice call is setup.

23. (Original) The BS of claim 22, wherein the BS is configured to send the voice service call setup request message to a Mobile Switching Center (MSC) as an additional services request message that includes default voice service parameters generated by the BS rather than by receiving requested voice service parameters from the mobile station.

24-26. (Canceled)

27. (Currently amended) A method of call handling in a mobile station for use in a wireless communication network, the method comprising:

carrying on a packet-switched data call over an existing traffic channel; and
renegotiating the existing traffic channel for voice call use responsive to signaling from the network; and
changing from carrying on the data call to carrying on a voice call over the existing traffic channel.

28. (Canceled)

29. (Currently amended) The method of claim 27, ~~wherein carrying on a data call over an existing traffic channel comprises carrying on a packet data call, and~~ wherein renegotiating the existing traffic channel for voice call use responsive to signaling from the network comprises:

- receiving a call notification from the network via signaling on the existing traffic channel
 - indicating that an incoming voice call is pending for the mobile station;
- returning a notification response to the network via signaling on the existing traffic channel based on prompting a user of the mobile station as to whether receipt of the incoming voice call is desired;
- sending and receiving signaling as needed to and from the network via the existing traffic channel to reconfigure it for voice use; and
- receiving an alert message from the network via signaling on the existing traffic channel
 - indicating that the incoming voice call is set up and returning a call connect order to the network via signaling on the existing traffic channel.